REMARKS/ARGUMENTS

Claims 1-17 are pending herein. Claim 1 has been amended as supported by, for example, Fig. 6 of the present application. Claims 3 and 7 have each been amended as supported by, for example, Table 1 on page 8 of the Substitute Specification filed August 15, 2002. New claim 17 has been added as supported by, for example, Fig. 4 of the present application.

1. The rejection of claim 7 under §112, second paragraph is noted, but deemed moot in view of rewritten claim 7 submitted above. Although the PTO did not object to claim 3, Applicants have also amended the inequality recited in claim 3 to bring that claim in compliance with §112, second paragraph.

2. Claims 1-4 and 7-9 were rejected under §103(a) over Hsu. To the extent that this rejection might be applied against the amended claims, it is respectfully traversed.

With reference to Figs. 6(a)-(c) of the present application, pending independent claim 1 has been amended to recite that the adhesive forms a meniscus between (i) opposed sides of cover plate 5 and the flat surfaces of substrate 3, or (ii) opposed end portions of substrate 3 and respective surface portions of cover plate 5. Pending claim 1 has also been amended to clarify that the height of the meniscus is greater than the height of the adhesive Y. Applicants discovered that the unwanted concentration of stress in a portion of the adhesive layer (e.g., portion (B) shown in Fig. 5 of the present application) near the flat surface portions of the substrate between the V-grooves could be advantageously prevented by forming meniscus (C) between (i) portions of the sides of the cover plate and substrate flat surfaces, or (ii) opposed substrate end portions and cover plate surface portions. Accordingly, since stress does not build up in the adhesive layer portion positioned on the flat surface areas of the substrate, there is no occurrence of delamination of the optical fiber array along the flat

surface areas of the substrate on opposite sides of the V-grooves (see Substitute Specification, page 4, line 16--page 5, line 6).

Figs. 1 and 2 of Hsu show that optical fibers 12 are positioned in V-grooves of substrate 16 between the substrate and a glass plate 21. Fig. 5 of Hsu shows that optical fibers 12 include portions with varying diameters. For example, Hsu discloses that "Fiber 12 is etched in hydrofluoric acid (HF) in order to reduce the diameter of cladding 32 from 125 μm to a diameter as small as 10 μm" (see column 4, lines 16-19).

Fig. 2 of Hsu clearly shows that there are no adhesive layer meniscus portions formed between any portion of glass plate 21 and substrate 16. As discussed above, pending claim 1 has been amended to recite that the adhesive forms a meniscus between (i) opposed sides of the cover plate and the substrate flat surfaces, or (ii) opposed substrate end portions and cover plate surface portions. Again, the claimed adhesive layer meniscus structure prevents delamination of the optical fiber array along peripheral areas (i.e., flat surfaces) on opposite sides of the V-grooves that house the optical fibers.

Furthermore, since Hsu does not disclose that the adhesive layer forms a meniscus between portions of glass plate 21 and substrate 16, there is also no disclosure or suggestion in Hsu that "the height of the meniscus is greater than Y" (which is the distance between the substrate flat surfaces and the cover plate), as is also recited in pending claim 1.

In view of all of the foregoing, reconsideration and withdrawal of the §103(a) rejection over Hsu are respectfully requested.

New independent claim 17 has been added to further distinguish the present application over Hsu. New claim 17 recites that the distance Y between the flat surfaces of the substrate and the cover plate is maintained over the entire length of the cover plate.

The PTO's calculation with respect to the inequality recited in pending claim 1 (which is also recited in pending claim 17) is based solely on the dimensional relationships of the structures shown in the front view (Fig. 2) of Hsu's optical fiber array. Indeed, none of Hsu's drawings show the position of substrate 16 with respect to glass plate 21 in any view other than the front cross-sectional view shown in Fig. 2 of Hsu. As such, there is no disclosure in Hsu that the dimensional relationships between the structures shown in Hsu's front cross-view are maintained over the entire length of glass plate 21. Any conclusion to the contrary would be based on unfounded speculation. For example, since Hsu's optical fibers 12 include portions in which the diameter of the fibers are varied, it is likely that one would understand that Hsu's front view dimensional relationships are not satisfied over the entire length of glass plate 21. This is so because if glass plate 21 were to extend over fiber portion 34 shown in Fig. 5 of Hsu, for example, a cross-sectional view taken at a position near fiber portion 34 would reveal that the dimensional relationships between the structures at fiber portion 34 would be different from the dimensional relationships between the structures at fiber portion 33 (which corresponds to Hsu's front view shown in Fig. 2). Accordingly, new claim 17 provides further patentable distinctions over Hsu.

3. Claims 5, 6 and 10-16 were rejected under §103(a) over Hsu in view of EP 943, 942. Applicants respectfully submit that the arguments submitted above distinguish claim 1 from Hsu. Since EP '942 does not overcome the deficiencies of Hsu, and since claims 5, 6 and 10-16 depend either directly or indirectly from claim 1, those claims are also believed to be allowable over the applied prior art of record.

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

September 8, 2003
Date

Stephen P. Burr
Reg. No. 32,970

SPB/jms

BURR & BROWN
P.O. Box 7068
Syracuse, NY 13261-7068

Customer No.: 025191
Telephone: (315) 233-8300
Facsimile: (315) 233-8320